

FIG.1

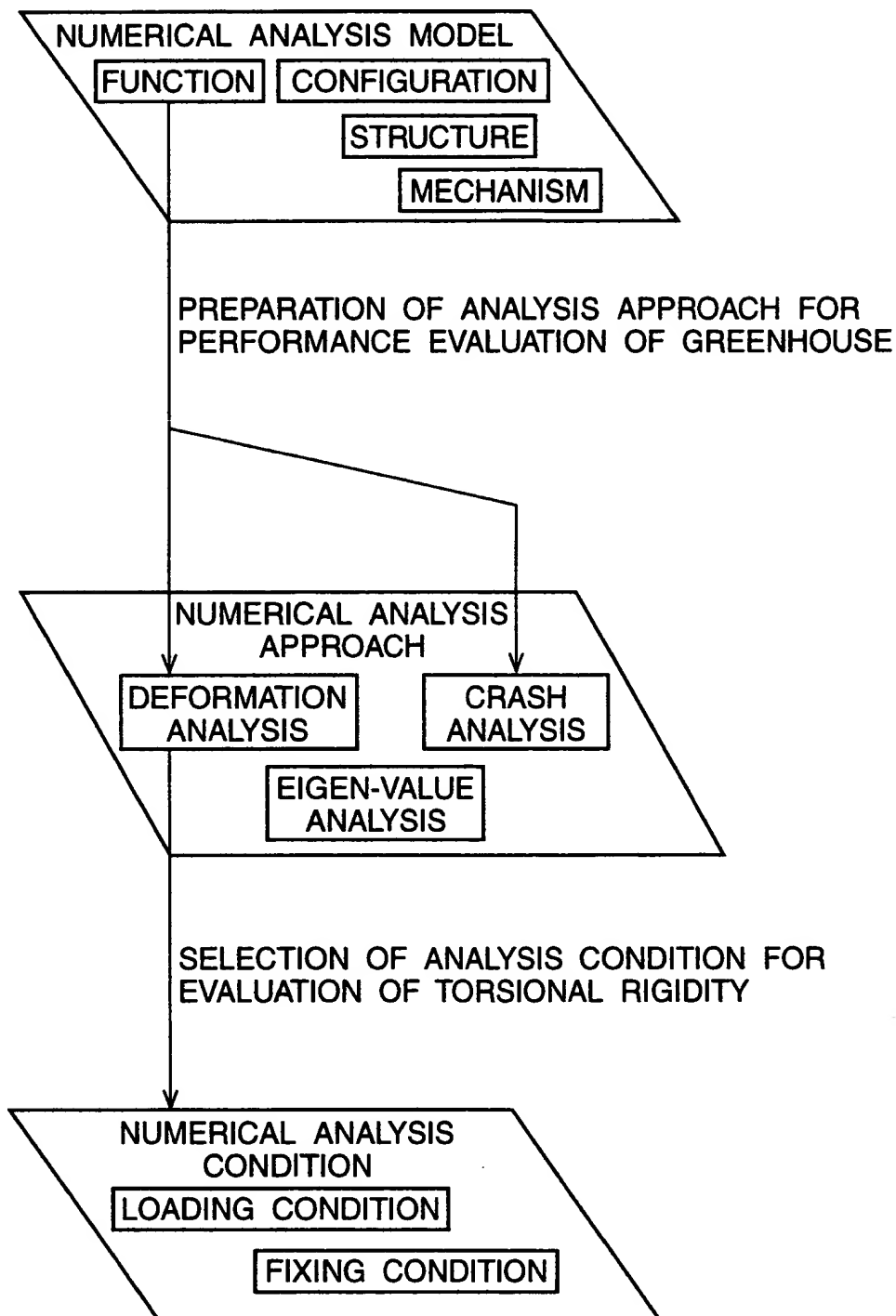


FIG.2

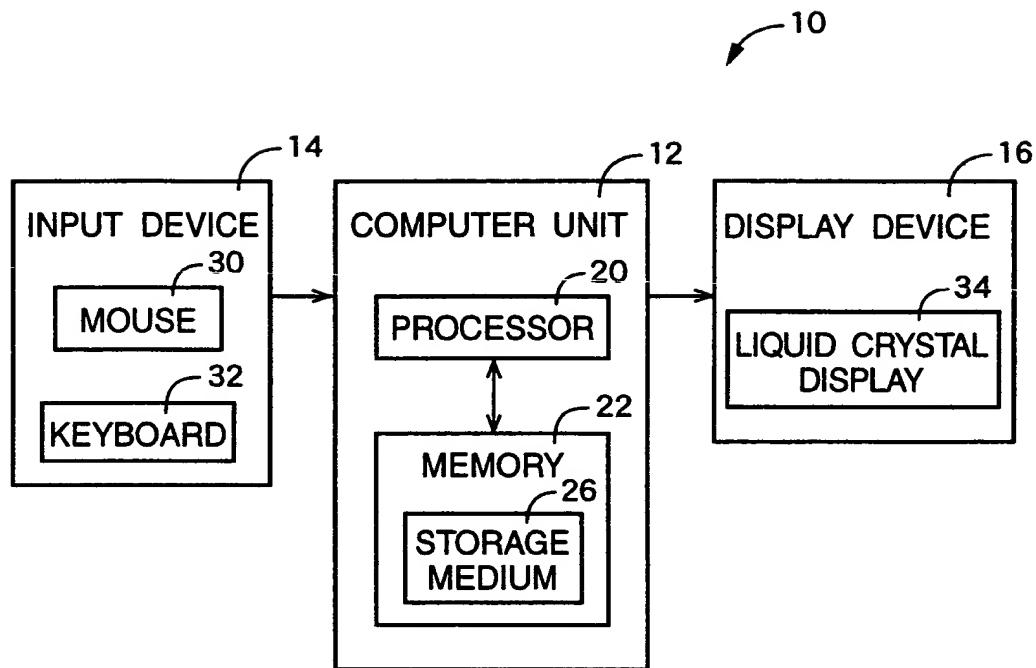


FIG.3

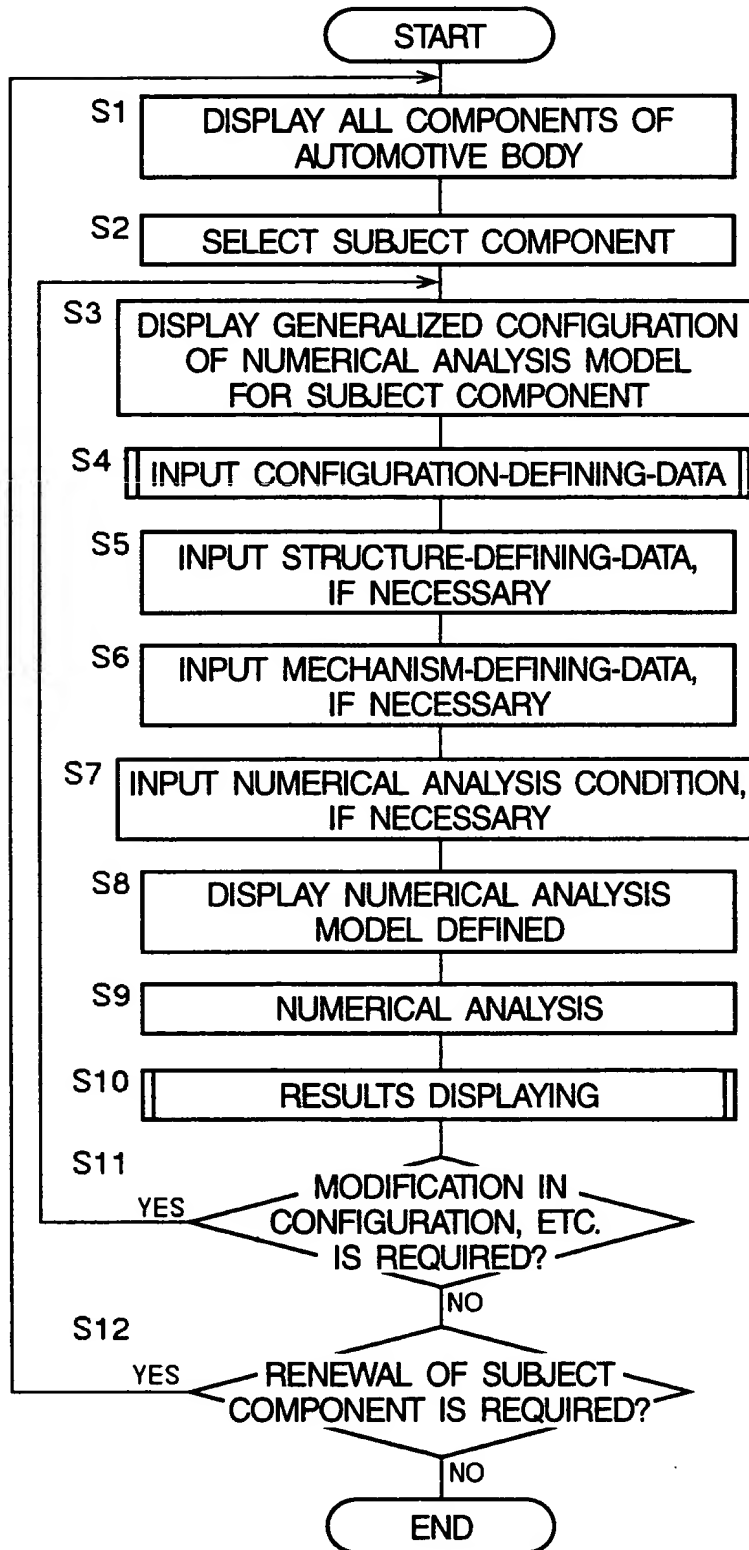


FIG.4

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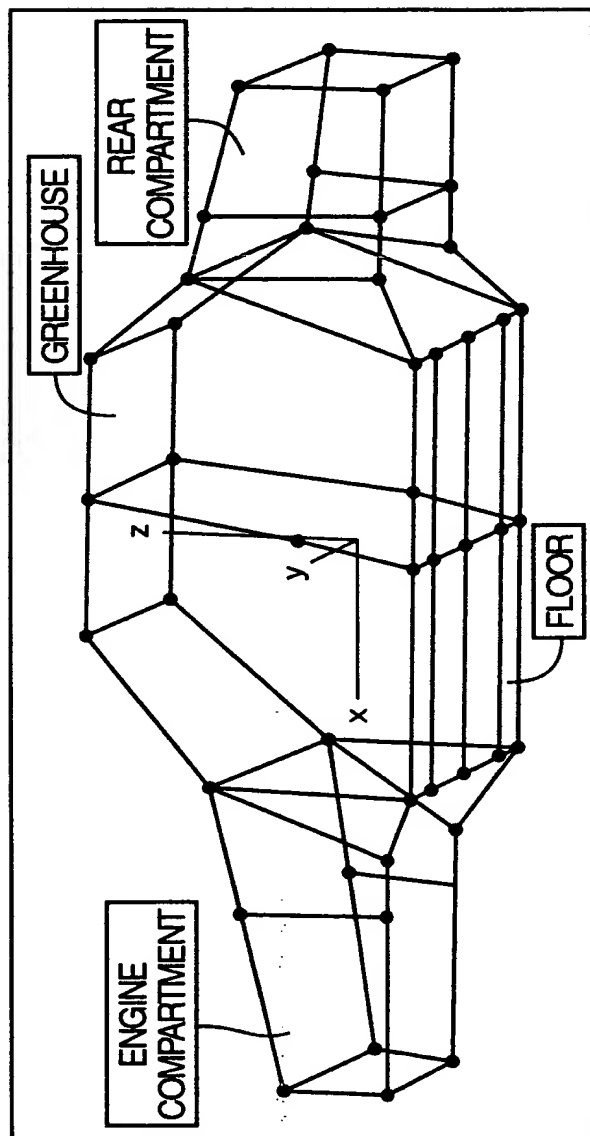


FIG.5

APPROVED	O.G. FIG.	
BY	CLASS	SUBCL
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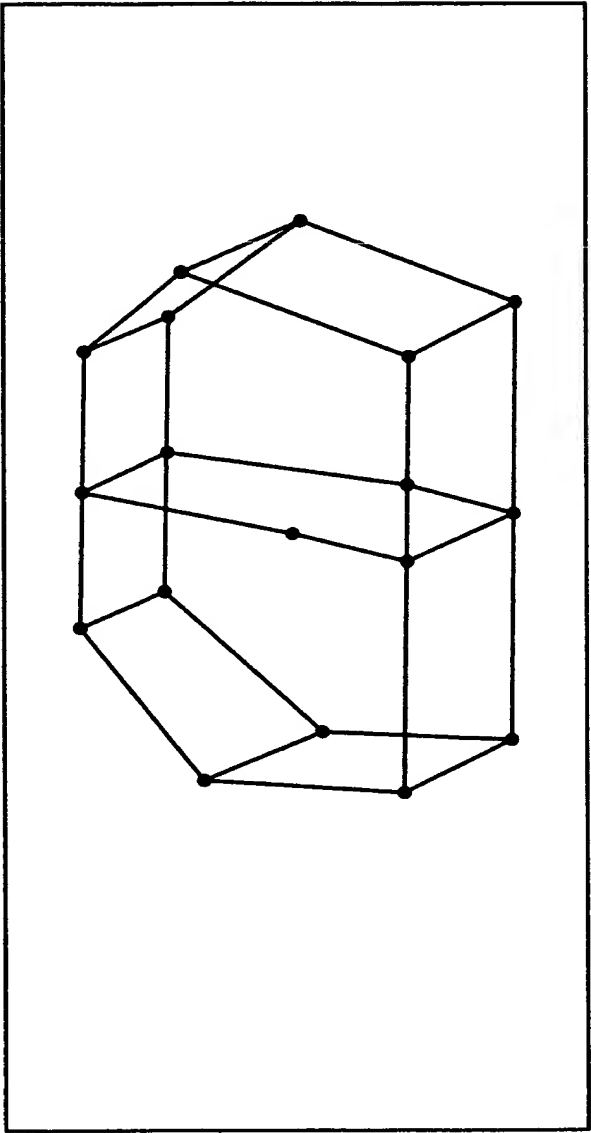


FIG.6

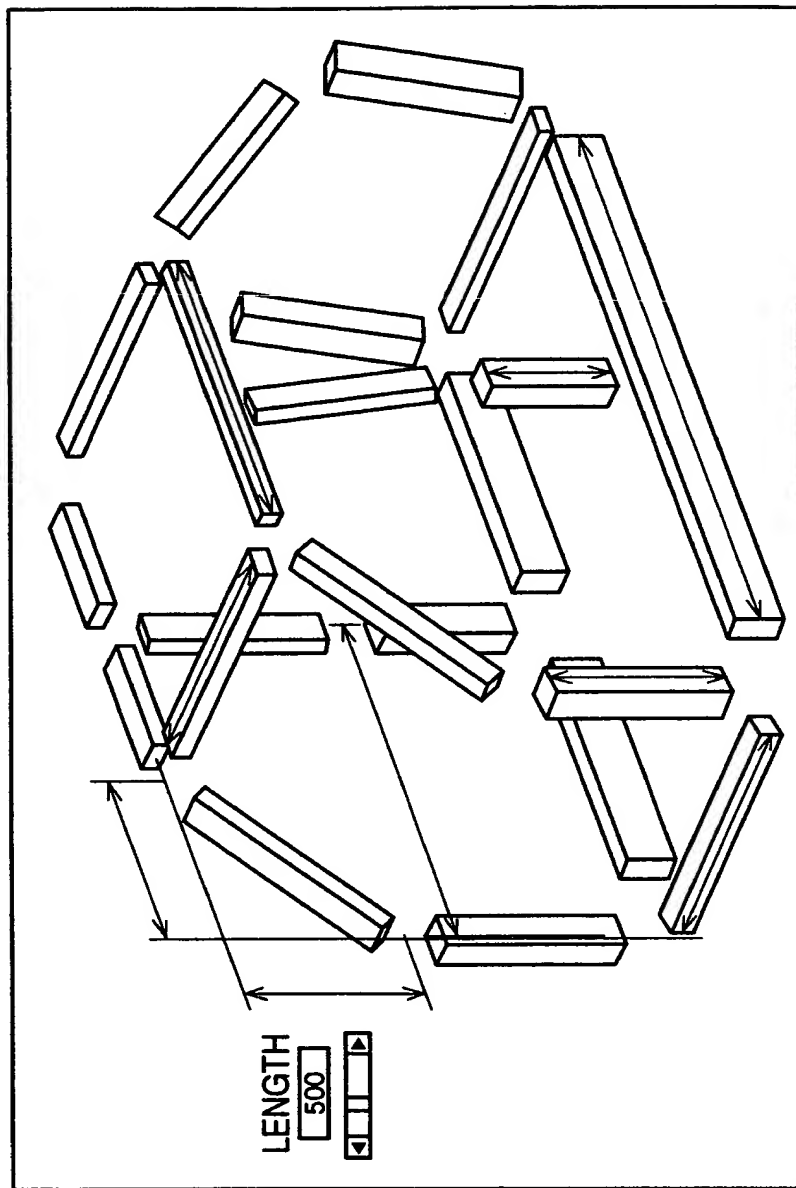


FIG. 7

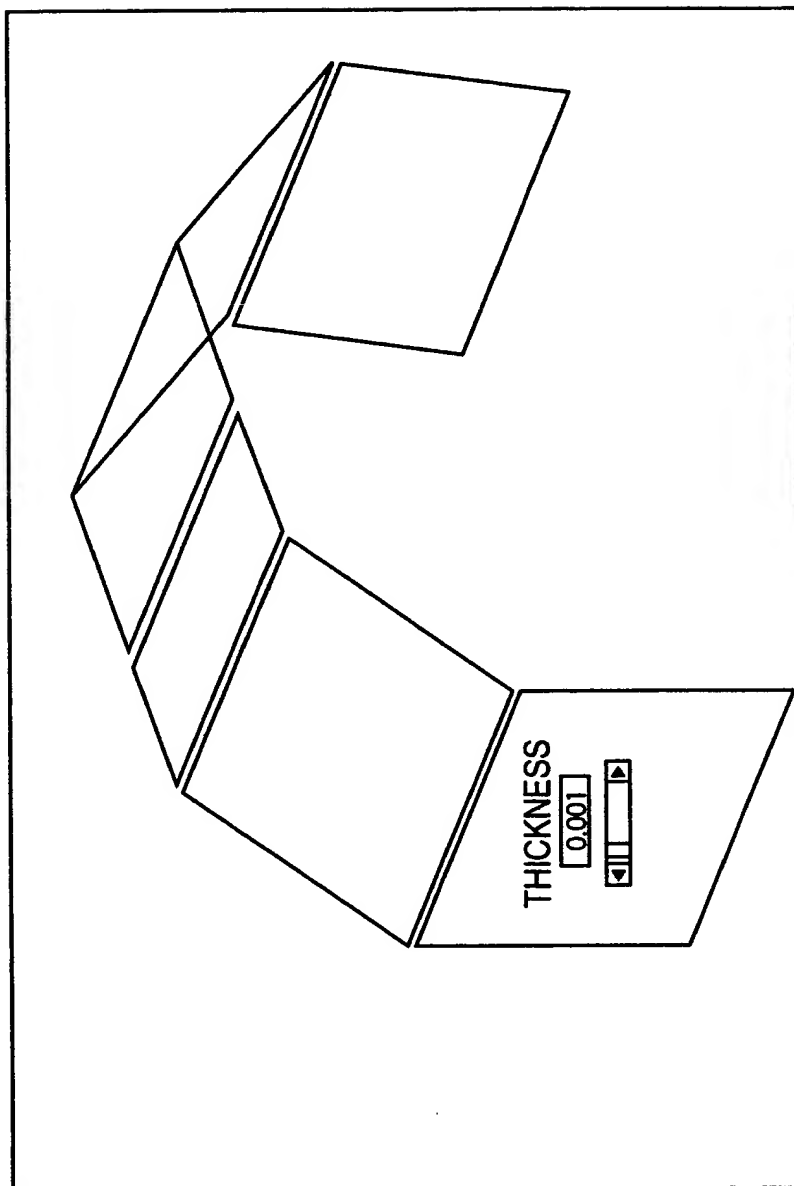


FIG. 8

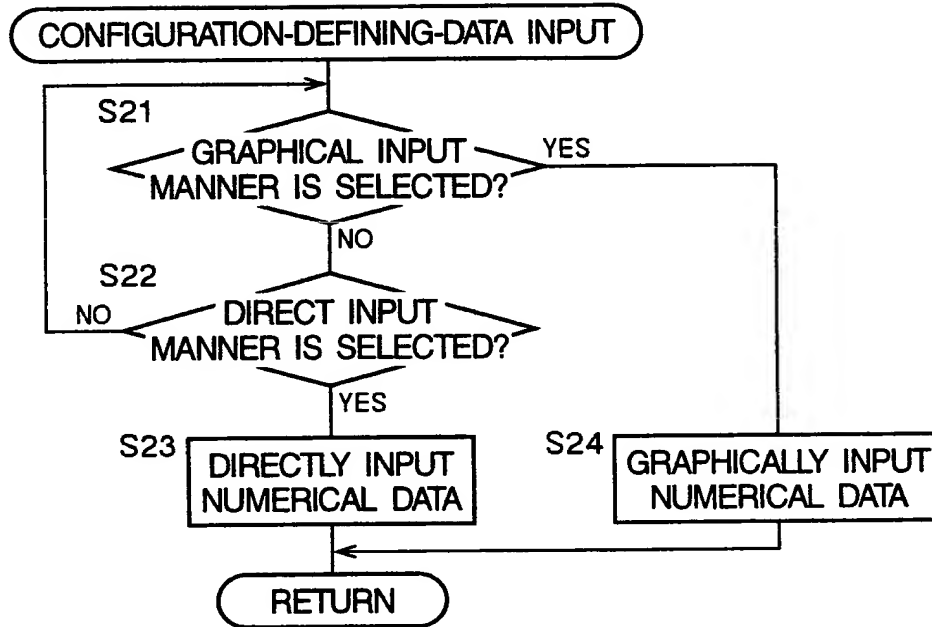


FIG.9

FIG. 10

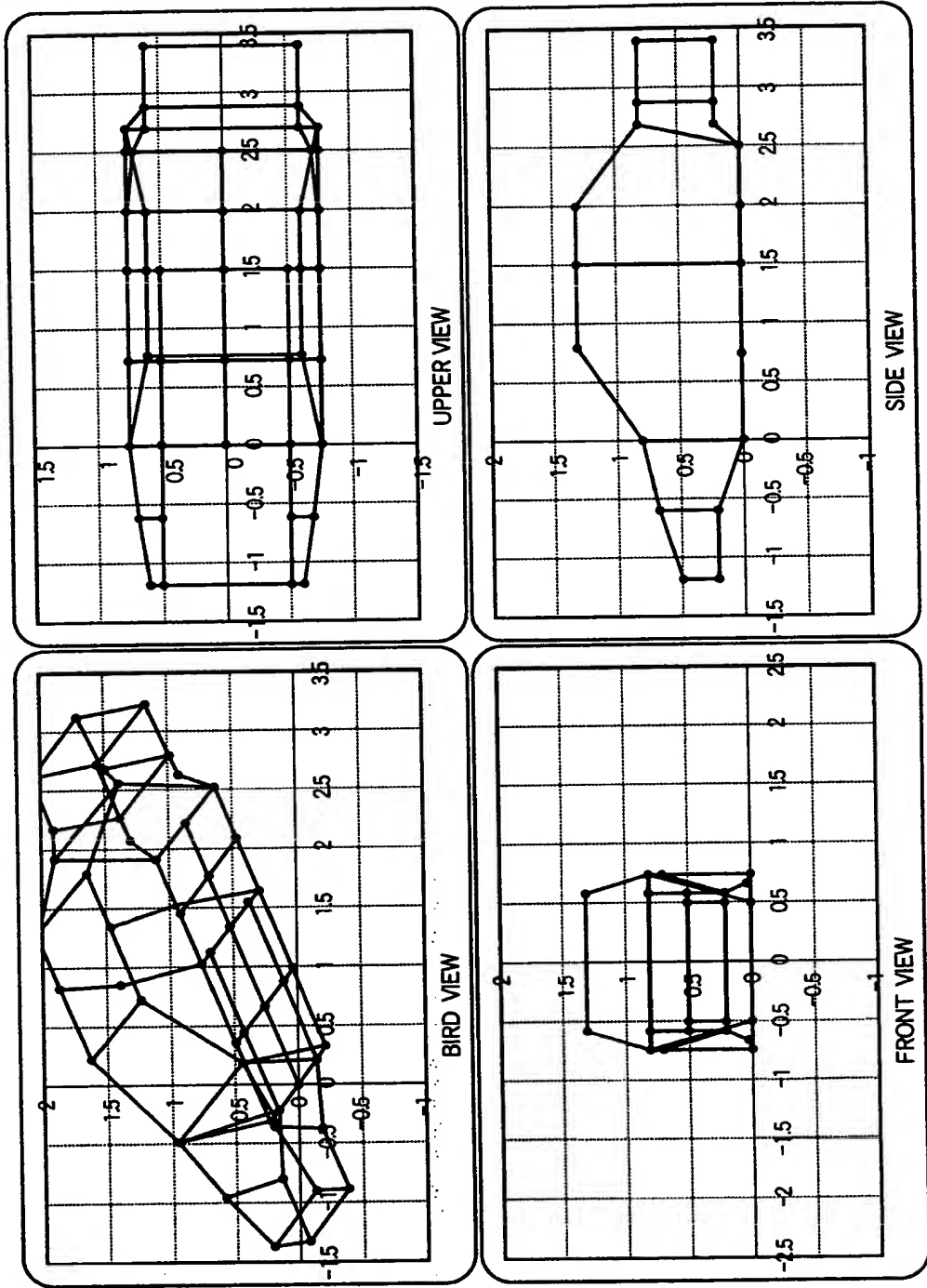


FIG.11

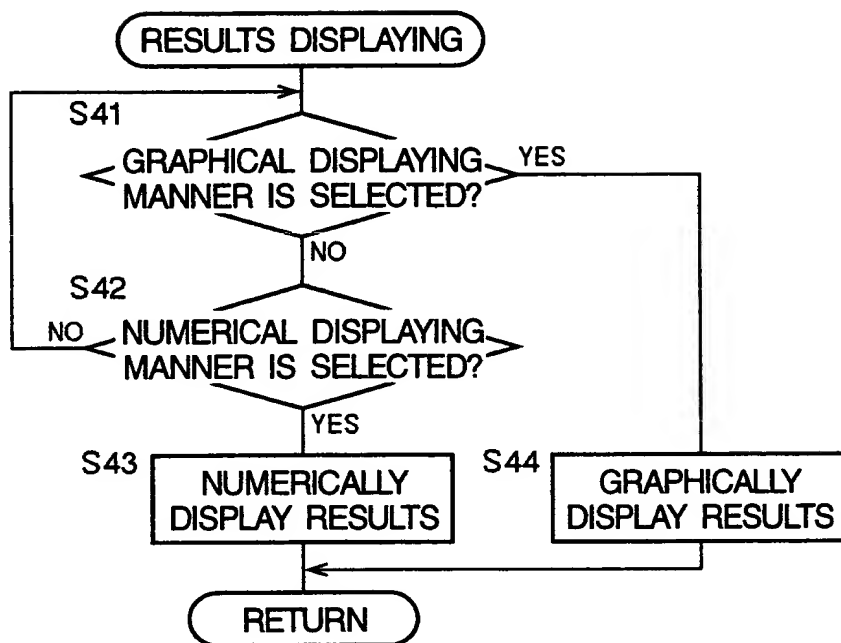
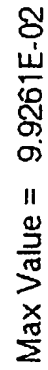


FIG.12



Positive
Negative

☐ Axial_Force ☐ Shear_Fy ☐ Shear_Fz ☐ Torsional_Moment ☐ My ☐ Mz ☐ Strain_Energy

FIG. 13

APPROVED	O.G. FIG.
BY	CLASS SUBC
DRAFTSMAN	

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	<div>ANALYSIS RESULTS SHEET</div>													
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
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29														

FIG.14

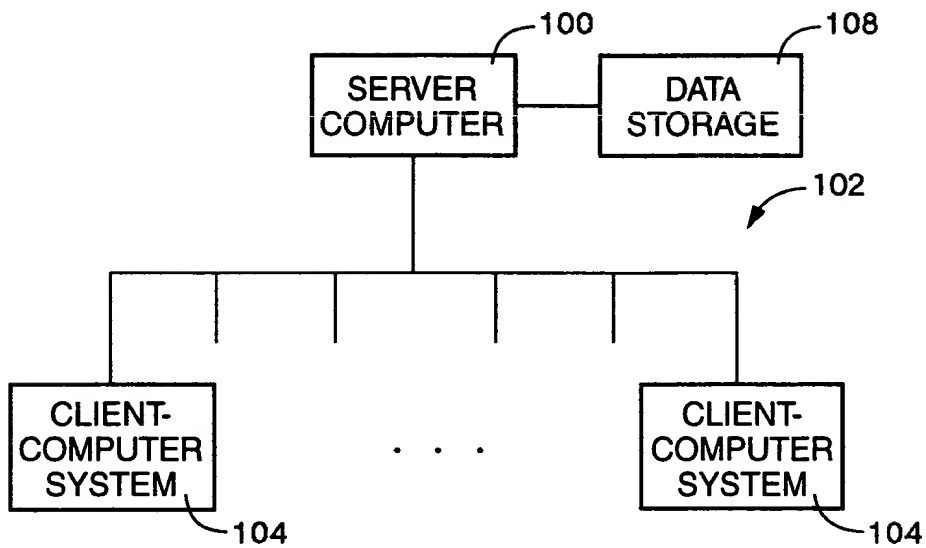


FIG.15

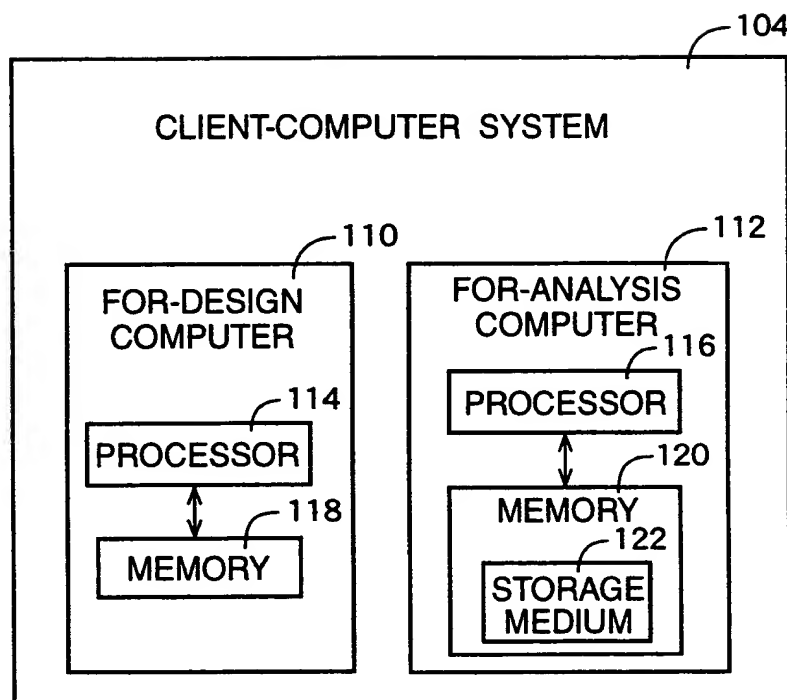


FIG.16

APPROVED	O.G. FIG.
BY	CLASS. SUEC.
RAFTSMAN	

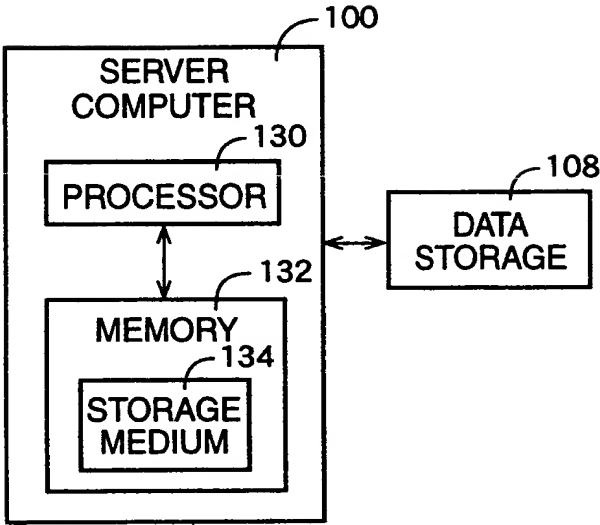


FIG.17

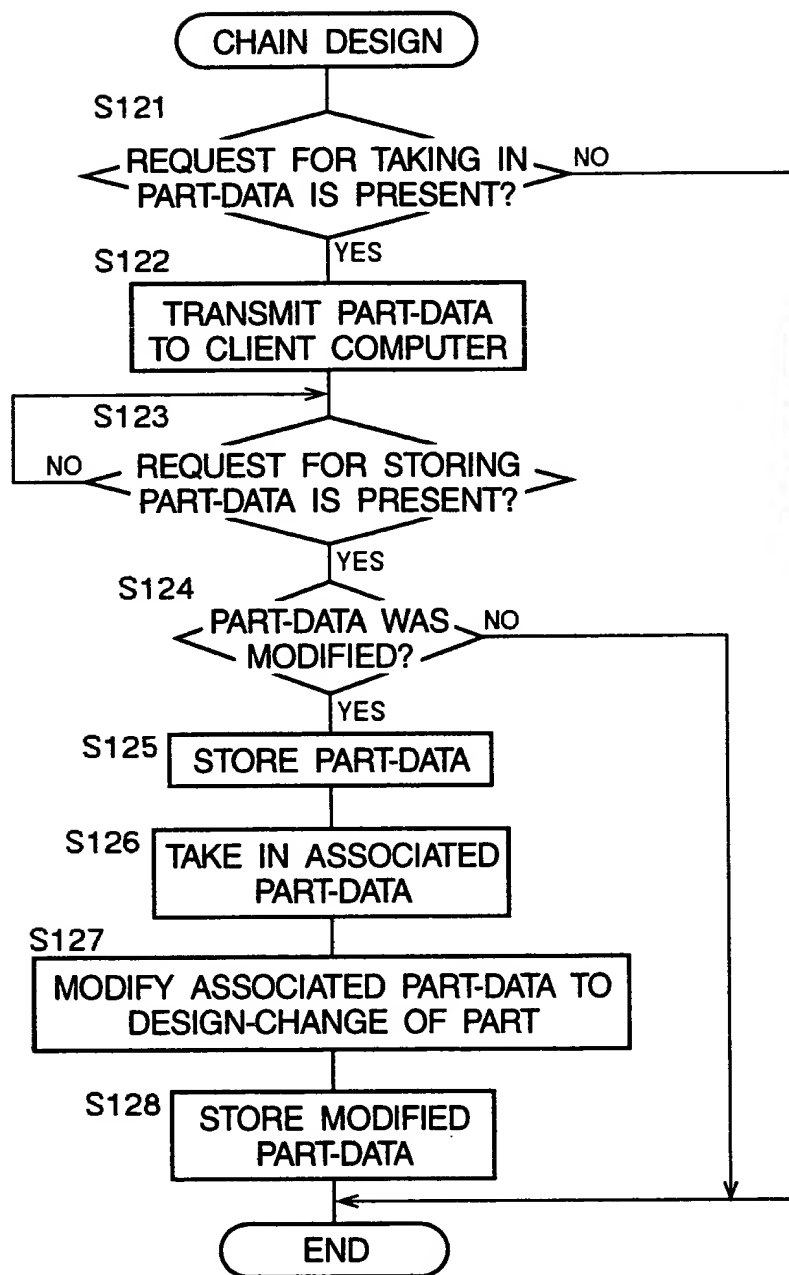


FIG.18

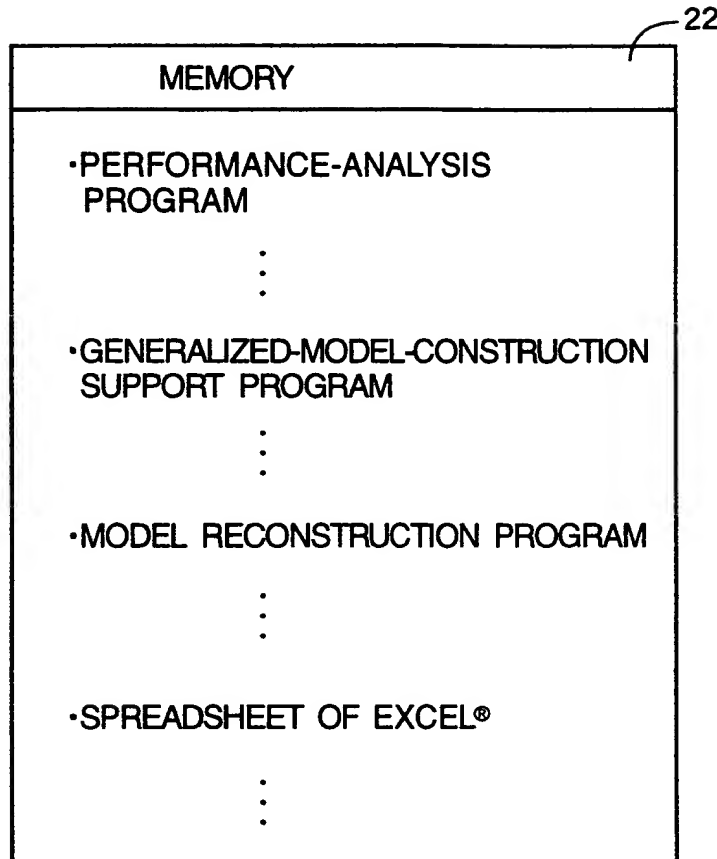


FIG.19

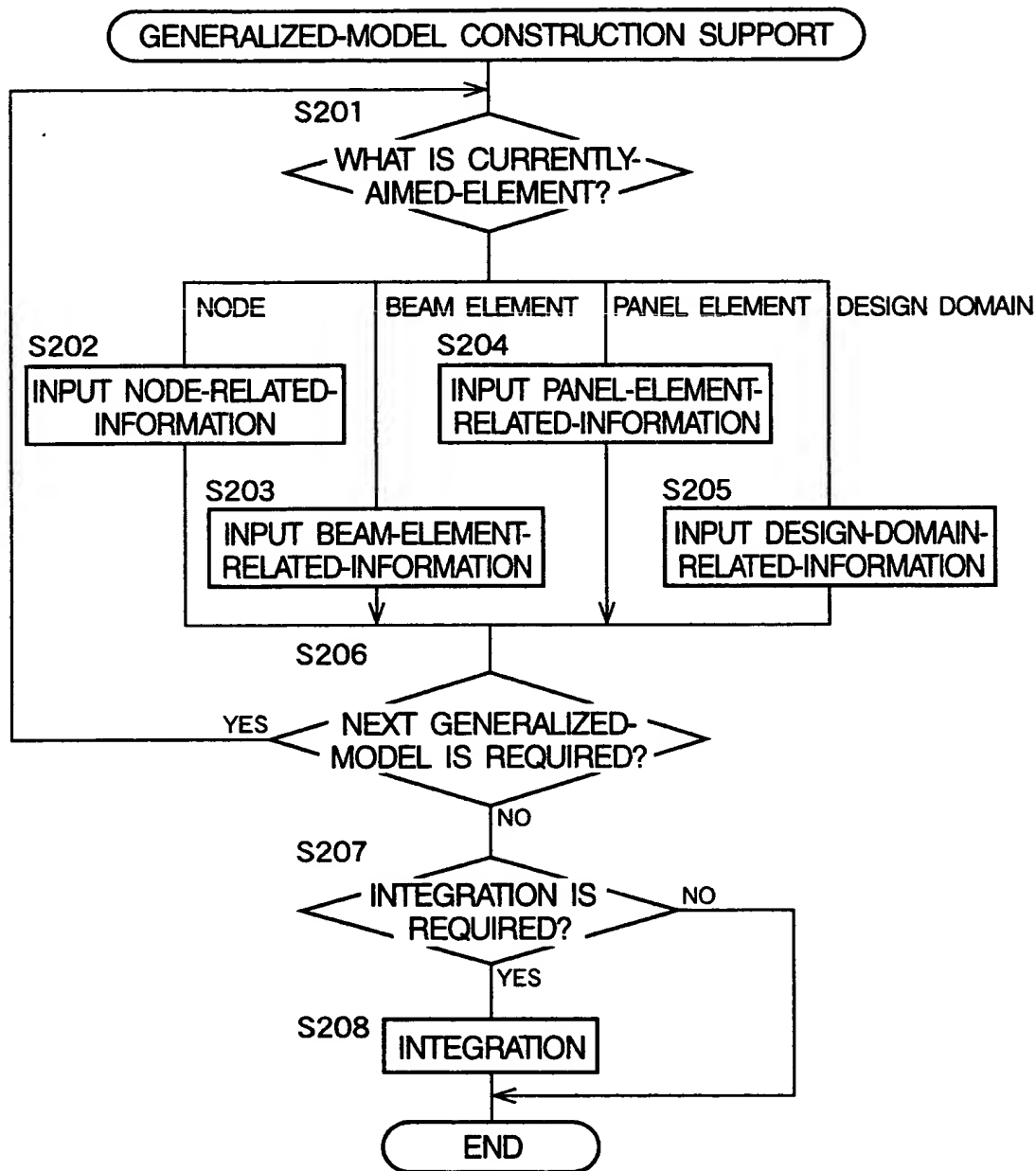


FIG.20

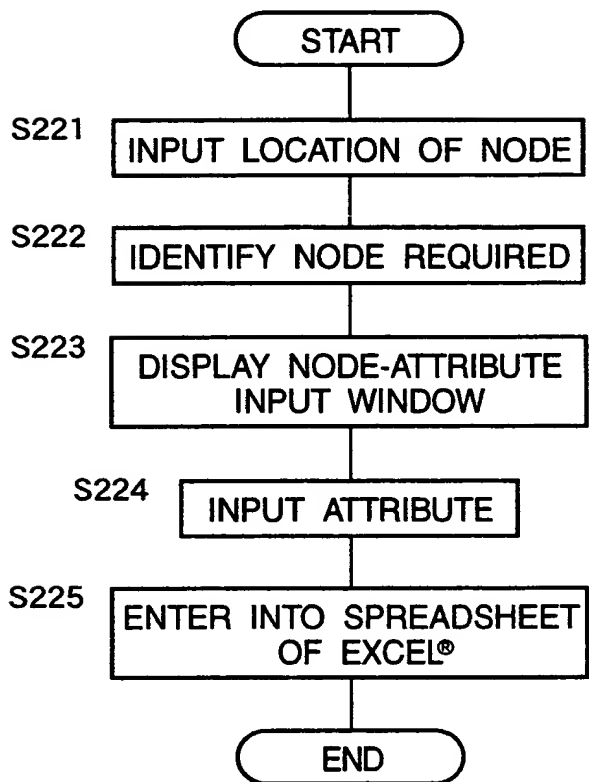


FIG.21

NODE-ATTRIBUTE INPUT

BOUNDARY CONDITION

FIXING CONDITION

DEGREE OF FREEDOM

☐ X

☐ Y

☐ Z

☐ Rot_X

☐ Rot_Y

☐ Rot_Z

SPRING STIFFNESS

LOADING CONDITION

LOAD

F_X

F_Y

F_Z

M_X

M_Y

M_Z

FIG.22

NUMBER OF NODES				NUMBER OF ELEMENTS				LOADING : L LOAD VALUE (E.G.; L10) CONSTRAINT : IF CONSTRAINED (=1) BY-BUSHING CONSTRAINT: B SPRING CONSTANT (E.G.; B10)									
8				10													
NODE NUMBER	X-COORDINATE [mm]	Y-COORDINATE [mm]	Z-COORDINATE [mm]	X- DIRECTION	Y- DIRECTION	Z- DIRECTION	ABOUT X-AXIS	ABOUT Y-AXIS	ABOUT Z-AXIS								
1	0	0	0	1	1	1	1	1	1								
2	1000	0	0														
3	3000	0	0														
4	4000	0	0			L-10000											
5	0	0	1000	1	1	1	1	1	1								

FIG.23

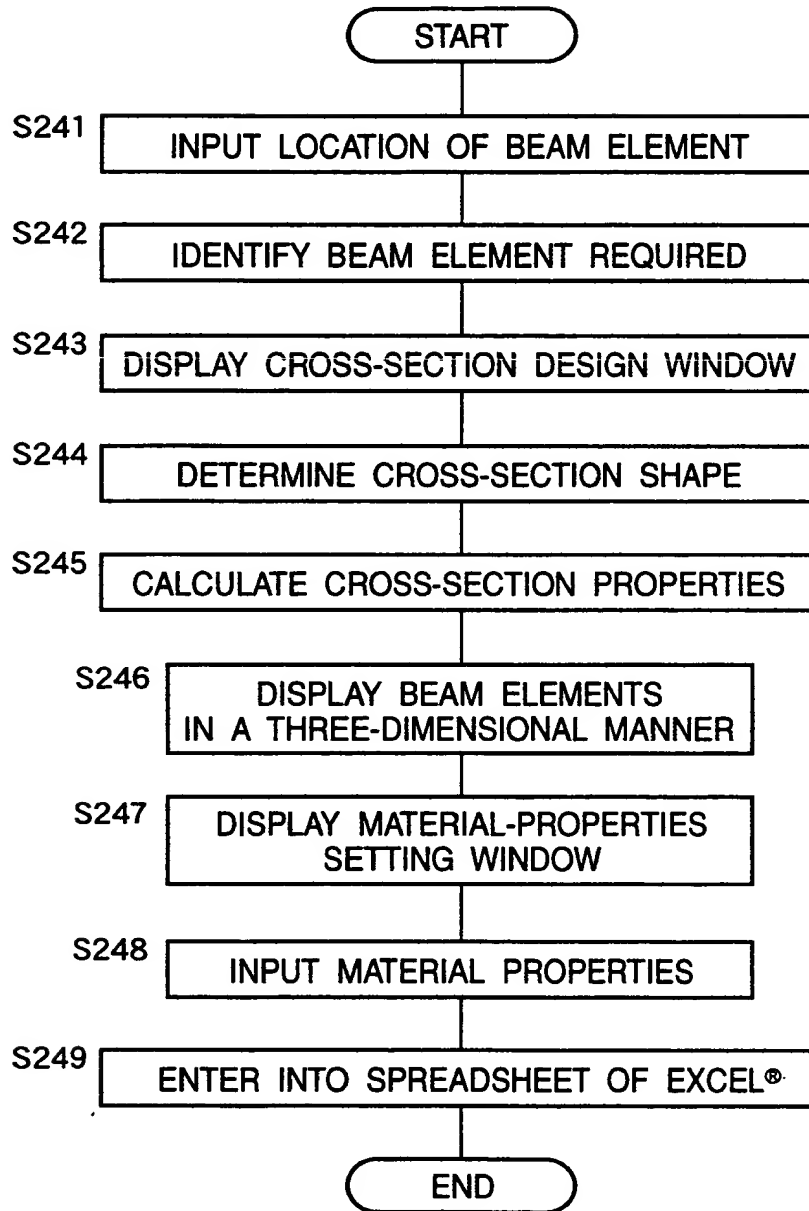


FIG.24

CROSS-SECTION DESIGN

CROSS-SECTION PROPERTIES

AREA OF

CROSS-SECTION = 5.6825E+02

MOMENT OF INERTIA OF

CROSS-SECTION Iy = 7.3488E+05

Iz = 1.0230E+06

AREA OF CROSS-SECTION Iyz = 1.5865E+05

PRINCIPAL AXIS [deg] = 2.3879E+04

ANGLE OF

ELEMENT NUMBER = 1

ELEMENT MASS = 4.46076E+00

SELECT ENHANCED

DISPLAY

ALL

▼

ODisplay OF THICKNESS

○ Display OF POINT AND LINE NUMBERS

ONON DISPLAYING

COORDINATES OF POINTS

y = 3.3218E+01

z = 5.5767E+01

SELECTION OF OPERATIONS

○ PRODUCTION OF POINT

○ MOVEMENT OF POINT

○ PRODUCTION OF LINE

○ DELETION OF LINE

○ MODIFICATION OF PROPERTIES (THICKNESS)

□ REPRESENTATIVE CONFIGURATION

ALL CLEAR

COPY OF CROSS-SECTION

SAVE & EXIT

CANCEL

WIDTH AND LENGTH OF DISPLAY

170

y: 170, z: 170

PRINCIPAL AXIS

CENTROID

ELEMENT COORDINATE AXES

1

2

3

4

5

6

COORDINATES OF ALL POINTS:

POINT NUMBER, (y, z)

1 3.3218E+01 5.5767E+01

2 1.7587E+01 -5.1888E+01

3 -5.0000E+01 -4.0000E+01

4 -5.6436E+01 3.0935E+01

5 7.0000E+01 4.0000E+01

6 -8.2184E+01 2.7716E+01

MODIFICATION

LINE PROPERTIES: LINE NUMBER, THICKNESS

1 1.20

2 1.20

3 1.20

4 1.20

5 2.40

6 2.40

THICKNESS = 1.0

COLLECTIVE MODIFICATION

○ MATERIAL-PROPERTIES SETTING BUTTON

FIG.25

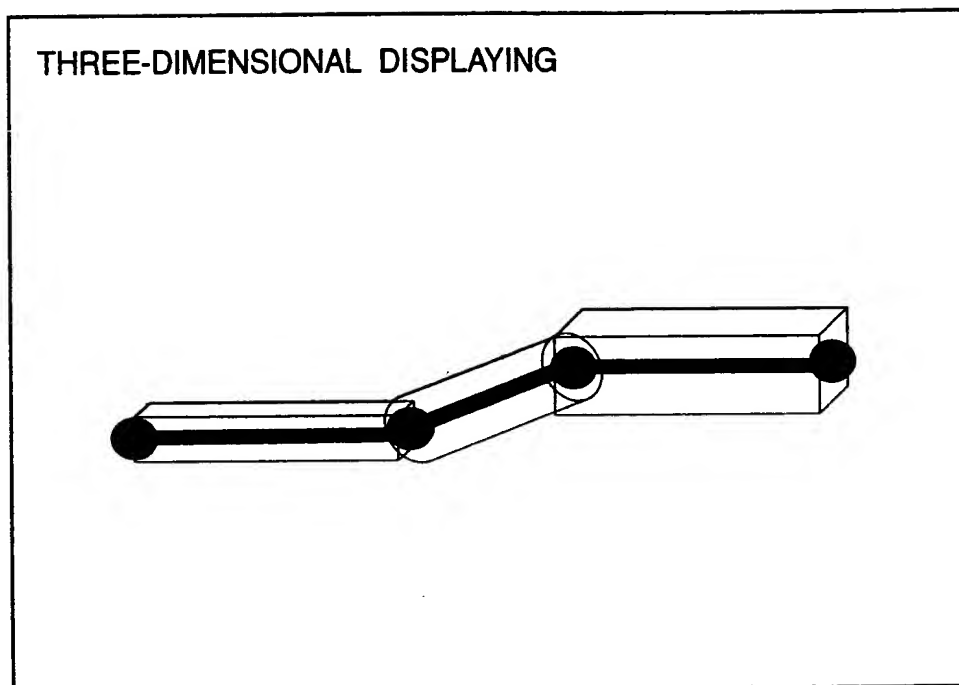


FIG.26

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BY	CLASS. SEC.
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SETTING OF MATERIAL PROPERTIES

MATERIAL OF BEAM ELEMENT

● IRON

.....

○ ALUMINUM

.....

○ OTHER

.....

FIG.27

DESIGNED	O.G. FIG.	
BY	CLASS	SUBC.
DRAFTSMAN		

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ELEMENT NUMBER	NODE1	NODE2	E[N/mm2]	ν	ρ [kg/mm3]	Bush side	ktx	kty	ktz
1	1	2	206000	0.3	7.85E-06				
2	2	3	206000	0.3	7.85E-06				
3	3	4	206000	0.3	7.85E-06				
4	5	6	206000	0.3	7.85E-06				
5	6	7	206000	0.3	7.85E-06				

FIG.28

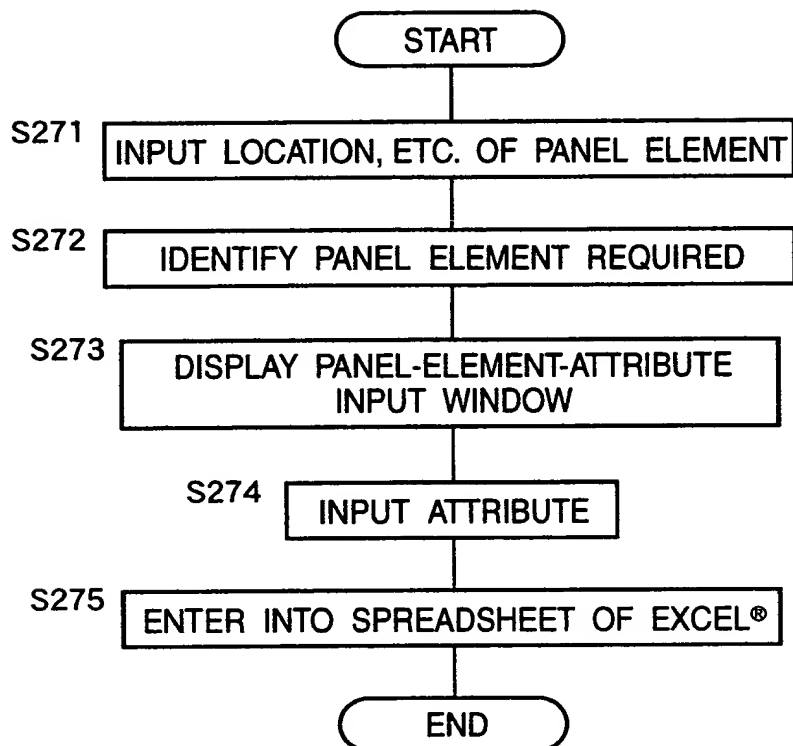


FIG.29

DESIGNED BY	FIG.
CLASS	SUBCL.
RAFTSMAN	

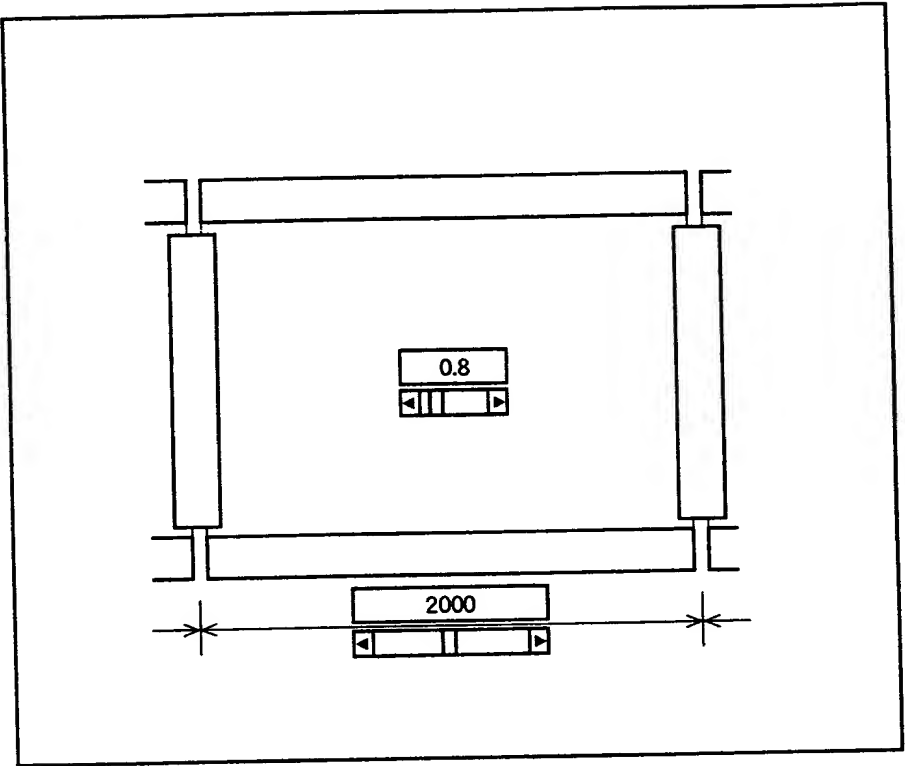


FIG.30

APPROVED	O.G. F.I.G.	
BY	CLASS	SUBC.
DRAFTSMAN		

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PANEL-ELEMENT-ATTRIBUTE INPUT

MATERIAL OF PANEL ELEMENT

☒ IRON
☐ ALUMINUM
☐ OTHER

FIG.31

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DRAFTSMAN

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ELEMENT NUMBER	NODE 1	NODE 2	NODE 3	NODE 4	E[N/mm2]	ν	Thickness
1	2	3	7	6	206000	0.3	0.8
2	3	4	8	7	206000	0.3	0.8

FIG.32

APPROVED	O.G. FIG.
BY	CLASS/SUBCL.
CRAFTSMAN	

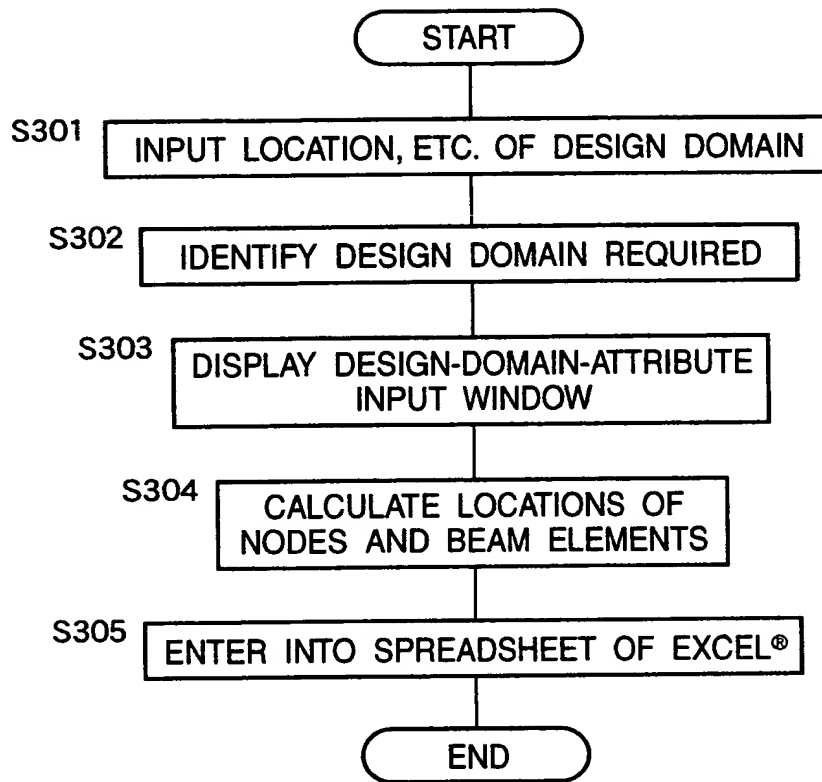
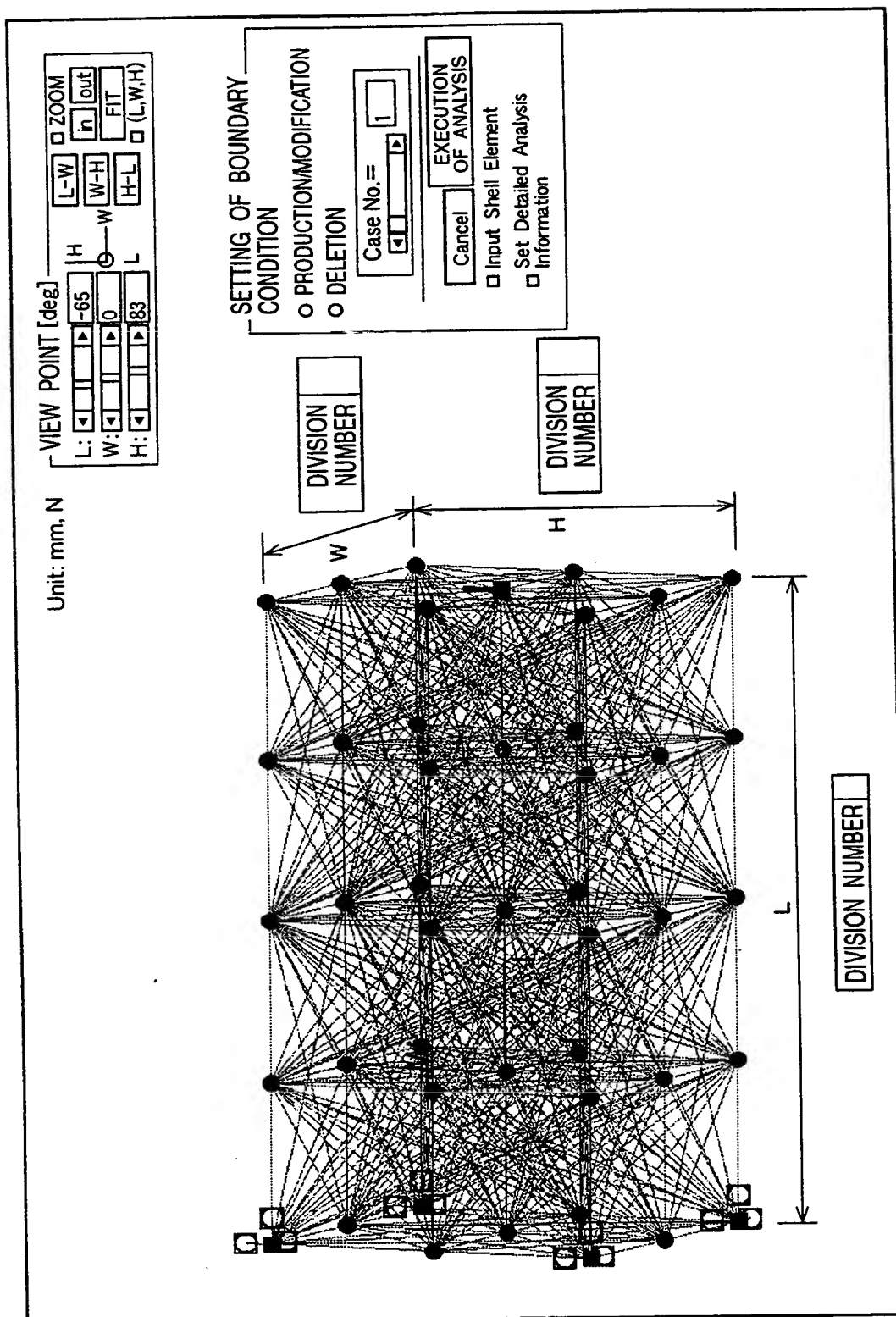


FIG.33



DESIGNED	O.G. FIG.	
BY	CLASS	SUBC.
DRAFTSMAN		

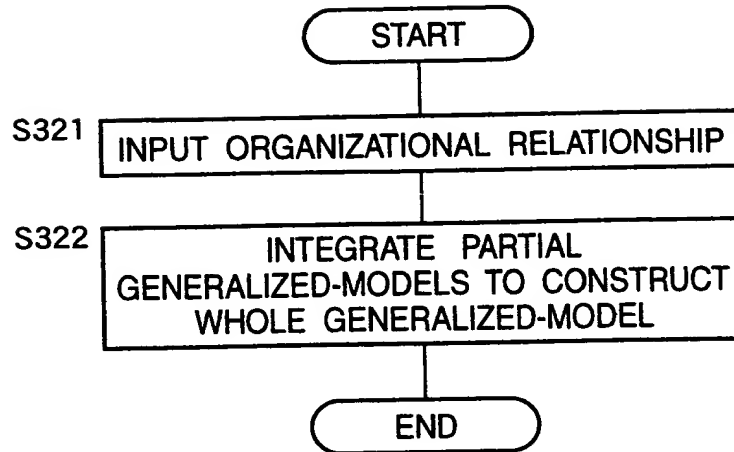


FIG.35

APPROVED	O.G. FIG.	
BY	CLASS	SUBCL
DRAFTSMAN		

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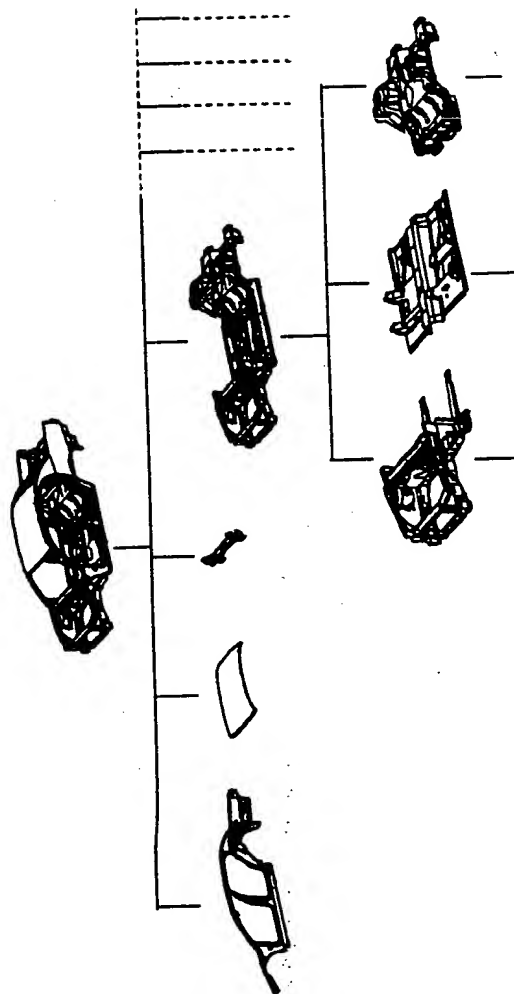


FIG. 36

APPROVED	O.G. FIG.
BY	CLASS, SUBC.
DRAFTSMAN	

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DOCKET #: 212031US2
INV: Hidekazu NISHIGAKI, et al.
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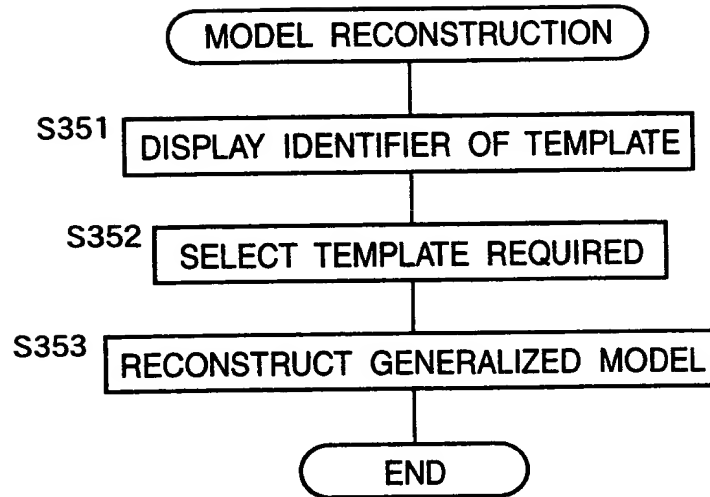


FIG.37

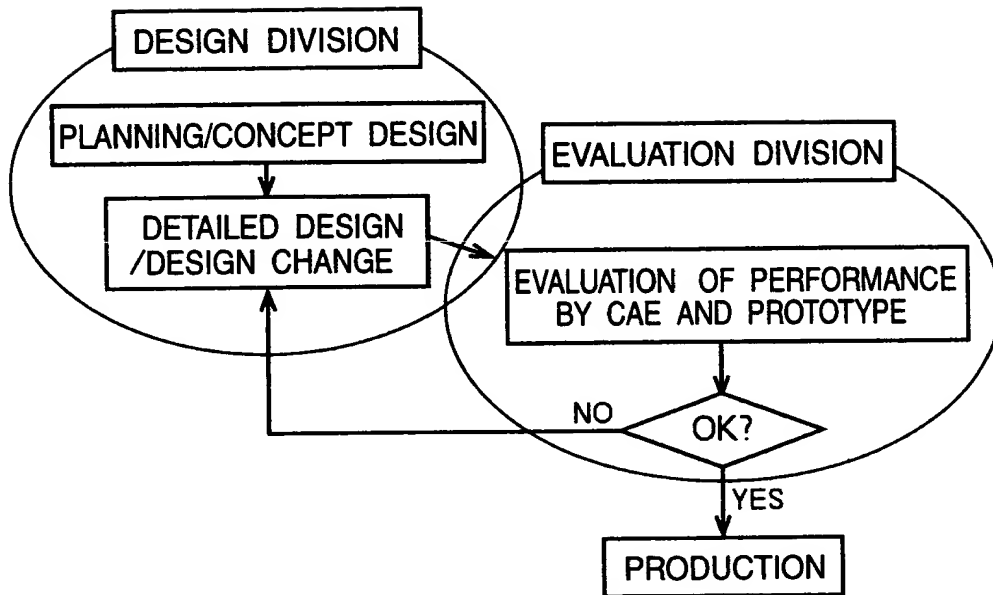


FIG.38